

Descriptions of fourteen new Species of Shells.

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[Read 20th December, 1888.]

(PLATE XXV.)

PLEUROTOMA (MANGELIA) BRIONÆ, sp. nov. (Pl. XXV. figs. 14, 15.)

Testa elongata, anguste turrata, pallide fulva, transversim obscurissime fusco multi-lineata; anfractus 9, convexi, spiraliter minutissime densissime striati, longitudinaliter costati, sutura impressa sejuncti; anfractus ultimus parviusculus, leviter convexus, costis 10 elevatis lævigatis munitus, ad basin acuminatus, vix productus; apertura oblonga, mediocriter lata, utrinque angustior; columella rectiuscula; labrum arcuatum, postice paulo sinuatum.

Long. 20, maj. diam. 6 millim.; apert. long. $7\frac{1}{2}$, maj. lat. $2\frac{1}{2}$ millim.

Hab. Hongkong.

This species somewhat resembles an elongated form of the British *P. nebula*, but is considerably larger, and distinguishable by a very long and turreted spire. The shell is apparently smooth, and the very fine spiral striæ can only be seen through a lens. The longitudinal ribs are rounded and smooth. Only one perfect specimen was brought by Dr. Hungerford from Hongkong.

OLIVA BÜLOWI, sp. nov. (Pl. XXV. fig. 3.)

Testa subcylindraceo-fusiformis, lutea, obscure griseo nebulata, antice conspicue rufo-fusco flammata; spira acuminata; anfractus 7, planato declives, griseo-fusco obscure fasciati, sutura canaliculata sejuncti; anfractus ultimus supra medium obscure angulatus, infra medium flammis rufo-fuscis obliquis peculiariter pictus; columella rectiuscula, 7-plicata, basi contorta, albo callosa, unisulcata; apertura modica, antice paulo latior, intus albidæ; labrum fere rectum, leviter complanatum.

Long. 32, maj. diam. 13 millim.

Hab. New Britain.

This shell resembles *O. emicator* (Meusch.) in form, but the colouring is very peculiar and characteristic, with conspicuous reddish-brown flames only on the lower part of the body-whorl. The type specimen is in the collection of Mr. Carl Bülow in Berlin, and is the largest I have seen; the smallest is about 20 millim., and the average length is about 26 millim.

MITRA FORMOSENSIS, sp. nov. (Pl. XXV. figs. 4, 5.)

Testa fusiformis, fusca, albo-fasciata; spira elongata, acuta; anfractus 11, leviter convexi, sutura impressa sejuncti, albo unifasciati, primi 8-9 longitudinaliter costellati, spiraliter multisulcati, deinde spiraliter striati, haud costellati; anfractus ultimus spiram subæquans, rotunde con-

vexus, fascia alba supra et infra medium ornatus, infra medium valde contractus, in cauda brevi desinens, spiraliter liratus; columella quinqueplicata; apertura intus albida; labrum crassiusculum, læve, nigro-fusco limbatum.

Long. 50, maj. diam. 16 millim.; apert. long. 24, lat. $4\frac{1}{2}$ millim.

Hab. Island of Formosa.

A species belonging to the "*Turricula*" section, somewhat resembling *M. caffra*, but with the whorls more rounded and the body-whorl much shorter in proportion to the spire, rounded in the middle and contracted at the base. Three specimens from the Island of Formosa, all similarly marked, and differing but little in form.

MITRA RECURVA, sp. nov. (Pl. XXV. fig. 7.)

Testa fusiformis, alba, fusco-maculata; spira acutissima, mucronata, subgradata; anfractus 10, superne angulati, deinde levissime convexi, longitudinaliter costati; costis numerosis, lævigatis, rotundatis, ad angulum tuberculatis, interstitiis transversim sulcatis; anfractus ultimus spiram leviter superans, infra medium multo et abrupte attenuatus, in cauda recurvata desinens; columella sinuosa, quinque-plicata, superne tuberculo albo rotundato munita; apertura longa, antice angustata, intus fusco-maculata; labrum arcuatum, tenue, pellucidum.

Long. 16, maj. diam. 6 millim.

Hab. Mauritius (*V. de Robillard*).

A very pretty little species, with a prolonged recurved canal. The longitudinal ribs are neatly tubercled at the suture, the interstices transversely grooved, and the turreted spire produced and attenuated towards the apex. The brown blotches are for the most part arranged in two zones above and below the middle of the body-whorl.

MITRA SMITHI, sp. nov. (Pl. XXV. fig. 6.)

Testa elongato-fusiformis, albida, fulvo fuscoque sparsim fasciata et maculata; spira acutissima, mucronata, subgradata; anfractus 11, convexiusculi, longitudinaliter costellati; costellis numerosissimis, angustis, confertis, rotundatis, lævigatis, juxta suturam tuberculatis, insterstitiis haud striatis; anfractus ultimus spiram æquans, supra et infra fascia pallide fulva fusco maculata picta, zona media albida, infra medium attenuatus, spiraliter sulcatus et granulatus, in cauda recurvata desinens; columella leviter sinuosa, triplicata, plicis crassiusculis; apertura longa, angusta.

Long. 16, maj. diam. 5 millim.

Hab. Mauritius (*V. de Robillard*).

Another elegant little species, in several respects similar to the last, but much narrower and more cylindrical in form; the ribs

much closer, and the interstices not grooved. The colouring and form of the apex, as well as of the canal, are curiously similar, as also the beading at the top of the ribs.

OVULUM (BIROSTRA) HAYNESI, sp. nov. (Pl. XXV. figs. 1, 2.)

Testa elongata, angustata, albida, polita, utrinque rostrata, postice attenuata, antice subtruncato-acuminata, extremitatibus acutiusculis, lateribus leviter convexis; apertura medio angustissima, postice paulo latior, antice dilatata; columella convexa, nitidissima, labrum incrassatum, leviter sinuosum.

Long. 34, maj. diam. 7 millim.; apert. maj. lat. $2\frac{1}{2}$, min. vix 1 millim.

Hab. Exmouth Gulf, W. Australia (*J. H. Haynes*).

A graceful species allied to *O. Philippinarum*, but larger and differing in form.

The specimens are nearly white, being found attached to a very handsome white species of *Melitodes*, which is also probably new to science, and of which Mr. Haynes collected several specimens in the above-named locality, one of which he presented to the Natural History Museum at South Kensington. The colour of *Ovulum* is probably determined by that of the place of attachment, as is the case with several well-known species which occur on West-Indian Gorgoniae, so that should specimens be found attached to *Melitodes ochracea* (of which Mr. Haynes found several in the same locality) they would probably be of an orange colour. Hitherto, however, they have only been found on the white species.

TROCHUS (INFUNDIBULUM) BACCATUS, sp. nov. (Pl. XXV. figs. 8, 9.)

Testa breviter conica, late umbilicata, luteo-albida, nigro fuscoque punctata; anfractus 6, convexiusculi, spiralter striati et granulis gemmuliformibus nigro-fuscis, fulvis et albidis quinquieseriatim dispositis instructi; anfractus ultimus ad peripheriam angulatus, infra planato-convexus, liris 6, angustis, parum elevatis, fusco articulatis ornatus; apertura obliqua; columella oblique rectiuscula.

Alt. 12, maj. diam. 14 millim.

Hab. Mauritius.

A pretty little species, regularly and exquisitely spotted and beaded.

THALOTIA WILKLE, sp. nov. (Pl. XXV. figs. 10, 11.)

Testa conica, elata, grisea, albo fuscoque maculata et strigata; apice fusco; anfractus 7, planato-declives, ad suturam undulater angulati, spiralter multi-lirati, liris rugosis, hic illic irregulariter nodulosi; anfractus ultimus inferne angulatus ad basin levissime convexus, angus-

tissime umbilicatus, spiraliter liratus, liris 8 (lira minima interveniente) rugosiusculis; columella leviter sinuata, lævigata; apertura subquadrata, intus argentea.

Alt. 19, maj. diam. 15 millim.

A single specimen, locality unknown.

AMATHINA IMBRICATA, sp. nov. (Pl. XXV. figs. 12, 13.)

Testa elongato-subtrigona, inæquilatera, sordide alba, utrinque angulata, postice incurvata; dorso leviter concavo, laminis rugosis transversis partim tubulosis sculpto, margine sinistrali bicarinato, dextrali unicarinato, lateribus corrugatis, dextra concava, sinistra planulata; apice minutissimo; apertura oblonga, antice quadrata, postice rotundata.

Long 13, maj. diam. 7, maj. alt. 5 millim.

Hab. Mauritius.

This species differs from the type (*Amathina tricarinata*) in several particulars. Of the three keels, two are close together on the left dorsal margin, and the broad space between these and the right keel is curiously laminated and corrugated. A single specimen of this interesting shell has been sent me from Mauritius by M. V. de Robillard.

COCHLOSTYLA (AXINA) GLOYNEI, sp. nov. (Pl. XXV. figs. 16, 17.)

Testa globoso-depressa, imperforata, solidiuscula, nigro-fusca, ad apicem pallida, epidermide albida hydrophana, in strigis obliquis et fasciis transversis dispositis pulcherrime ornata; spira convexa, apice obtusa; anfractus 6, convexiusculi, lente accrescentes, oblique striati, sutura impressa sejuncti; anfractus ultimus subinflatus ad peripheriam obscurissime angulatus, superne et inferne convexus; columella brevissima, albida, oblique recta; apertura parviuscula, transverse oblonga, leviter arcuata, ubique subæqualiter lata, intus purpurea; labrum arcuatum, tenuiter reflexum, leviter complanatum, purpureum, fusco limbatum.

Maj. diam. 33, alt. 24 millim.; apert. long. 15, lat. 6 millim.

Hab. Philippine Islands.

A single specimen, in perfect condition, of this interesting shell is in the collection of Mr. C. P. Gloyne. The whitish diaphanous epidermis in oblique streaks and transverse bands relieves the plain dark-brown colour of the shell; which, though not particularly remarkable in form, differs considerably from its congeners.

ORTHALICUS MACANDREWII, sp. nov. (Pl. XXV. fig. 18.)

Testa elongata, griseo-fulva, fusco zonata et strigata, hic illic nigro radiata; apice obtusiuscula, griseo-lilacea; anfractus $8\frac{1}{2}$, regulariter accrescentes, convexiusculi, longitudinaliter leviter striati, sutura impressa

sejuneti, lineis 3 vix conspicuis fusco alboque articulatis (in anfr. postpenult. evanidis) spiraliter notati; anfractus ultimus spiram subæquans, rotunde convexus, zona supra griseo-fulva, media et infra fusca; columella fere recta, tenuicula, intus griseo-lilacea, extus nigra; apertura semiovalis, intus lilacea; peristoma simplex, haud reflexum, vix incrassatum, nigro limbatum, margine columellari callo nigro late interne suffuso induto.

Long. 70, maj. diam. 30 millim.; apert. long. 28, maj. lat. 16 millim.

Hab. Santiago de Cou, Peru.

This species, of which I have only seen a single specimen, is similar in form to *O. Bensoni*, but it has no spiral sculpture and the colouring consists principally of light brown zones with a few longitudinal streaks of brown and black; the articulated painting is very slight, and is only to be seen on the upper whorls.

PECTUNCULUS CREBRELRIRATUS, sp. nov. (Pl. XXV. fig. 20.)

Testa transverse ovata, erassa, subæquilateralis, albida, fusco hic illic sparsim maculata et fasciata, costis circ. 30, parum elevatis, et liris numerosissimis angustissimis radiata, striis concentricis cancellata, minutissima granulata; umbones prominentes; area ligamenti recta angustiuscula, medioeriter longa; latere antico rotunde arcuato, postico angulato; margo dorsalis posticus declivis; cardine arcuato, dentibus numerosis divergentibus instructo, pagina interne alba, postice fusco tincta.

Long. 35, umbonis marg. 31 millim.

Hab. Moreton Bay, Australia.

Resembling *Pectunculus angulatus* in form, but quite differently sculptured. It is densely radiately ridged throughout and sculptured with minute transverse striæ, which give a rough granular character to the surface. The epidermis remaining on the margin of the shell is velvety.

CRASSATELLA JAPONICA, sp. nov. (Pl. XXV. fig. 19.)

Testa ovato-trigona, crassa, inæquilateralis, fulva, fusco radiata, concentricè irregulariter striata; umbones acuti, approximati; area dorsalis utrinque medioeriter excavata; latere antico rotunde arcuato, postico biangulato; margo dorsalis posticus recto-declivis; pagina interna carnea, impressiones musculares fulvo imbutæ.

Long. 32, umbonis marg. 27 millim.

Hab. Japan.

A very distinct species, though presenting no very prominent characters. The style of radiation is common to many of the *Crassatellæ*, but the rough irregular striation in place of the ordinary concentric grooves is peculiar.

CLAVAGELLA MINIMA, sp. nov. (Pl. XXV. figs. 21, 22.)

Testa parva, alba; tuba longitudinaliter compressa, apertura leviter reflexa, haud fimbriata; valva dextra lata, planulata, extus concentricè irregulariter rugata, intus argentea, margo dorsalis fere rectus, ventralis valde arcuatus.

Valvæ, umbonis marg. 7, antero-post. 10 millim.

Hab. Mauritius (*V. de Robillard*).

This small Mauritian species is certainly distinct from the Maltese *C. aperta*, but it is impossible to say whether the specimens are full-grown or not. I have seen four specimens differing but little in size, two of which are in the National Collection at South Kensington.

DESCRIPTION OF PLATE XXV.

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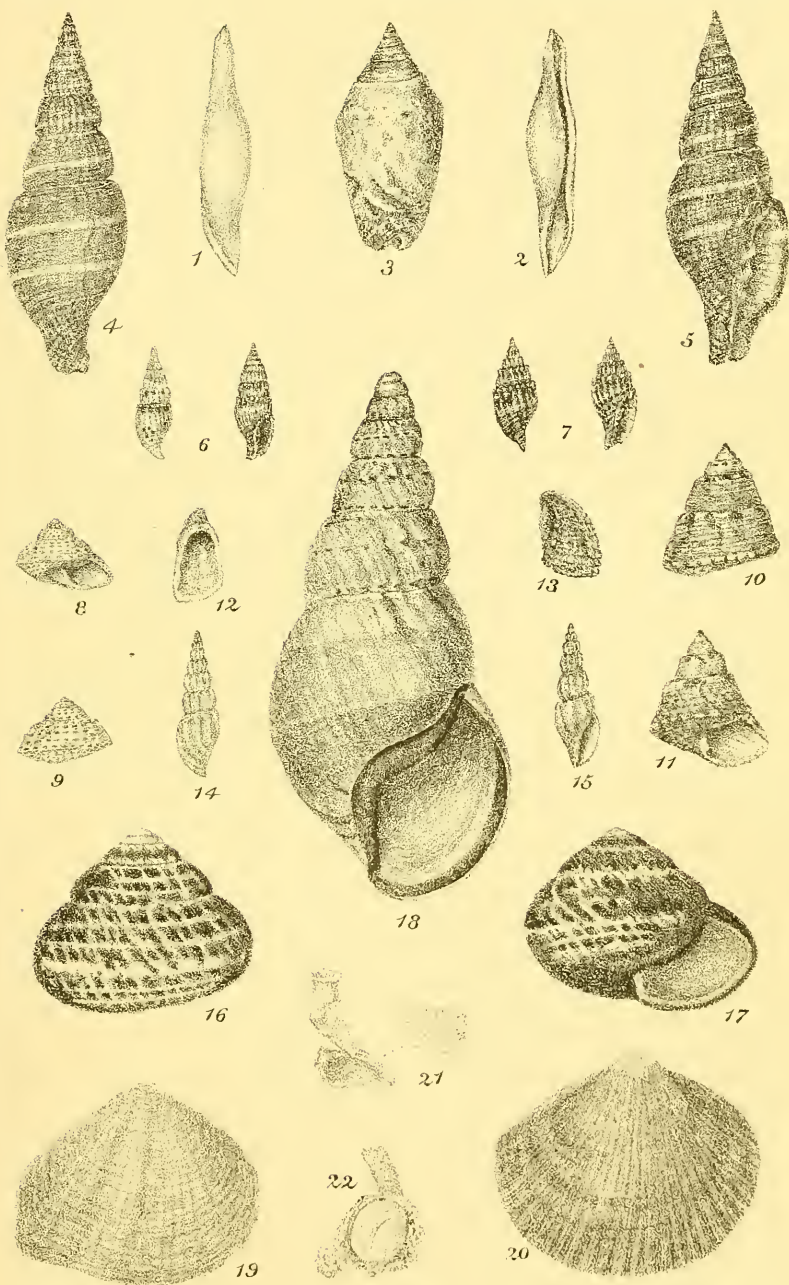
On some unrecorded Parasitic Acari found in Great Britain.

By A. D. MICHAEL, F.L.S., F.Z.S., F.R.M.S.

[Read 7th February, 1889.]

(PLATE XXVI.)

I SPENT the summer of 1888 in Derbyshire, near Chatsworth: the cold and wet season, however, rendered ordinary open-air collecting very fruitless; I therefore took the opportunity of obtaining all the wild mammals which I could obtain alive, or immediately after death, with a view to see whether I could find any unknown forms of parasitic *Acari*. My search was rewarded by finding the three species recorded in this paper, which, I believe, were not previously known. The *Myocoptes* adds another to this curious genus, which was founded by Claparède, and of which there was only one species known previously; both are parasites of the mouse and rat tribe; they are strictly ecto-



C.B.S. del.

Hanhart imp.